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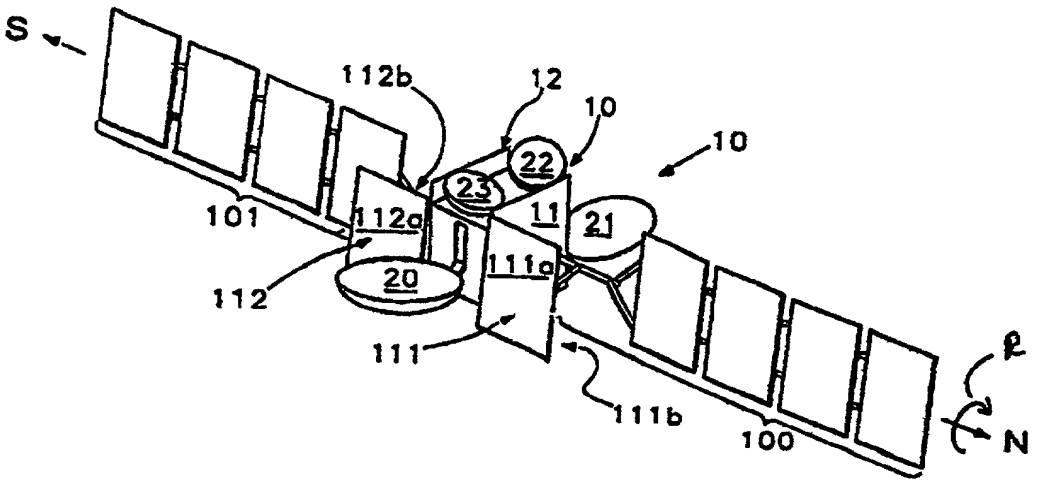

(57) Abstract

A spacecraft having a sun ray blocker device (111, 112, 141, 271, 301, 411, 511, 611, 811, 921, 951, 1800, 2100, 2700) for shading a thermal radiator surface (11, 12) of the spacecraft in which the sun ray blocker device is movable in relation to the thermal radiator surface to keep the surface substantially in shade without substantially blocking thermal radiation from the thermal radiator surface to deep space. Preferably a sun-facing side (111a, 112a) of the sun ray blocker device is thermally insulated from an opposed side (111b, 112b) to reduce thermal radiation from the sun ray blocker device to the thermal radiator surface and the sun ray blocker device is also preferably deployable in orbit after launch.